

of the Saxifragaceae more than it does the Crassulaceae. Morphological features also suggests it is most closely allied to that family.

Ruiz, S.Z. and J. Rzedowski. Three new *Pinguicula* species (Lentibulariaceae) of Mexico. *Phytologia* 60(4): 255-263. 1986.

The three new species of *Pinguicula* are:

P. barbata from Chiapas

P. emarginata from Veraeruz and Puebla

P. takakii from San Luis Potosi

Sheridan, Phil. 1986. The Sarraceniaceae of Virginia. *Virginia J. Science*. 37: 83. (Abstract of paper presented at Virginia Academy of Science, May, 1986).

The current and historical ranges for *Sarracenia flava* and *S. purpurea* were analyzed over a two-year period based on field work, personal interviews, bibliographic searches and herbarium specimens. *S. flava* was found to have occurred in eight counties for a total of seventeen locations. Three sites were relocated in three counties, and two new ones found. *S. purpurea* ranged over 14 counties with 19 populations. Three historical locations

were refound in three counties with four new colonies in one county. Color variants were noted, and the ideal habitat was a springhead. Recommended status for both species in the State is threatened. DES

Teryokhin, E.S. 1986. The development and structure of the *Aldrovanda vesiculosa* (Droseraceae) seed. *Bot. Journ.* 71: 527-533. / Russian, Leningrad. /

Embryogenesis of *Aldrovanda*, *Dionaea* and *Drosera* is similar. The seed of *Aldrovanda* is possessed of a thick seed coat of 3 layers. The storage tissue (endosperm) fills about 2/3 of the seed volume. Cotyledons, apex and hypocotyl are morphologically indicated, but no anatomical signs of primary root are present in the embryo. ST.

Zavortink, T.J. *Zinzala*, new subgenus of *Wyeomyia* with two new species from pitcher plants in Venezuela. *Wasmann. J. Biol.* 43(1/2): 46-59. 1985.

The immature stages of the mosquitoes *W. zinzala* and *W. fishi* inhabit the leaves of the *Heliamphora* pitchers found in the Gran Sabana region of Venezuela.

DROSERA ANGLICA FROM THE ALAKAI SWAMP, KAUAI, HAWAII

by J.A. Mazrimas

On the oldest island of the Hawaiian chain, stands an old 5,148 foot extinct volcano, Mt. Waialeale. At the base of this volcano is a 30 square-mile bog which is constantly being rained on throughout the year. This area receives more than 460 inches of annual rainfall and is noted as one of the wettest places on earth. In this bog one can find many unusual flora and fauna which are either very rare or became extinct due to man's predation. However, we are fortunate to still have in the Alakai bog the small, herbaceous plant called *Drosera anglica*.

Several years ago I acquired a few plants from a friend who visited this area. The plants were carefully adjusted into some Canadian sphagnum peat moss and kept evenly moist in my tropical greenhouse. They grew vigorously and seemed to flower throughout the spring and summer season. The flowers produced seed on their own and the seed germinated into tiny plantlets after several weeks. I found by experimentation that the plants do not form hibernacula to carry them over the cold, winter frost and snows as do the North American types. The plant growth slows down and even seems to stop during the winter despite the warm temperatures and artificial lights extending the daylight hours. I'm almost tempted to think that this plant is an annual, producing copious seed to assure its continuance in the bog. Plants in cultivation seem to die off during the winter. (Cont'd. next page)

The plant can also be propagated from leaf cuttings which are pressed firmly on the peat moss medium and carefully watered to keep evenly moist. Small buds emerge after several weeks which grow into mature, flowering plants the following season.

When compared with N. American plants, the Hawaiian *Drosera* is about one-half the size in all its parts. It is an interesting species to grow because it is easier to grow this plant in a terrarium or warm greenhouse, and it grows over a long season with plenty of flowers throughout its growing cycle. This is not true with the N. American type which flowers only once in spring and tends to go into dormancy after 4-5 months. I am propagating this plant to obtain seed which will be sent to our seed bank in the near future and available for CPN members who ask for it.

SEED BANK

**Patrick Dwyer (St. Michael's Episcopal Church,
49 Killean Park, Albany, NY 12205)**

To send seed: Please remove seed from the seed capsules and place it in small envelopes (preferably paper so that they dry out enough to prevent mold). Label with the origin and date of collection, including habitat if it is exotic. Fold the envelope once or twice before taping so that the seeds don't stick to the tape. After the seed is received it will be placed in smaller packets; donors will be informed of how many packets they have donated. A donation of 10-19 packets earns one free seed packet of comparable rarity, with one additional free packet for each additional 10 packets.

Do not ask to trade for seed from the bank. Everyone will have to buy all but the free packets.

To order seed: Please enclose payment. List the seeds desired and an equal number of substitutes in order of preference. If requested, Patrick will add any cultural instructions of which he is aware. Each issue of CPN will include an update of the inventory. Cost per packet: \$.75 (Number of packets is listed if less than 15 are available.)

(as of 12/25/86)

Byblis liniflora (10), *Capsella bursa-pastoris* [carn. seed] (13), *Darlingtonia californica*, *Dionaea muscipula*, *Drosera aliciae*, *D. anglica* (10), *D. auriculata* (3), *D. binata* (5), *D. binata multifida extrema* (2), *D. burkeana*, *D. burmannii*, *D. capensis*, *D. capensis* [narrow leaf], *D. capensis* [wide leaf], *D. capensis* [mix], *D. capillaris* (4), *D. cuneifolia* (4), *D. dielsiana*, *D. filiformis* (3), *D. filiformis*, *D. filiformis filiformis* x *D. filiformis tracyi* (1), *D. gladuligera* (4), *D. indica* (10), *D. intermedia*, *D. intermedia maxima* [Gulf Coast], *D. macrantha*, *D. montana* (3), *D. montana* [white fls.] (3), *D. natalensis* (3), *D. pulchella* (1), *D. pygmaea* (1), *D. rotundifolia*, *D. spathulata* (6), *D. spathulata* [Formosa] (1), *D. spathulata* [Kansai] (10), *D. spathulata* [Kanto] (1), *D. spathulata* [New Zealand] (1), *D. spathulata* [white fls.] (1), *D. stolonifera* (15), *D. trinervia* (4), *D. villosa* (6), *D. whittakeri* (7), *Drosophyllum lusitanicum* (4), *Nepenthes bicalcarata* (4), *N. khasiana*, *Pinguicula agnata* (3), *P. alpina*, *P. lusitanica* (10), *P. macroceras nortensis* (3), *P. moranensis* (3), *Sarracenia alata*, *S. flava* (1), *S. flava* [green] (6), *S. flava* [Green Swamp] (3), *S. flava* [mixed strains] (5), *S. leucophylla*, *S. minor* (10), *S. psittacina* [Gulf] (1), *S. purpurea*, *S. purpurea* [Gulf Coast] (3), *S. purpurea* [NJ-MD], *S. purpurea purpurea*, *S. purpurea venosa* 'Louis Burk', *S. rubra gulfensis* (5), *S. rubra jonesii* (1), *S. rubra wherryi*, *Utricularia aurea* (12), *U. capensis* (4), *U. lateriflora*, *U. longifolia* (1), *U. pentadactyla* (7), *U. racemosa* (12), *U. subulata*, *U. ulignosa* (4).

SARRACENIA HYBRIDS

flavaleuco [Gulf], *purpurea* 'Louis Burk' x *flava* [red] (1), *psitt*/purp x *minor*, *flava* x *leuco*/purp (2), *purp* x *flava* x *alata* (2), *oreo*/psitt x *leuco* (4), *leuco*/minor x *rubra* (1), (*purp* x *flava*) x self (7), *oreo*/minor x *psitt*/oreo (1), *oreo* x *purp* purp (6), *leuco* [dk] x *flava* [red tube/green lid] (10), *alata* [red throat] x *flava* [red tie/green lid] (6), *rubra gulfensis*/leuco x